



NHSN Dialysis Event Protocol Review

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Objectives

- Understand the purpose and scope of dialysis surveillance.
- Identify required reporting components.
- Patient-reported vs. provider-observed symptoms.
- Objective evidence for reportable events.
- Handling reports from external dialysis centers and ERs.
- Define key terms related to NHSN dialysis reporting.

Purpose of Dialysis Surveillance

- To track and prevent bloodstream infections (BSIs) and other dialysis related complications among outpatient hemodialysis patients.
- Focus on bloodstream infection (BSI) prevention and tracking.
- Provides national benchmarks and allows facility level comparisons.
- Data are used to drive quality improvement and patient safety initiatives.

What to Report – Annual Survey

- Upon enrollment and annually thereafter, facilities must complete the Outpatient Dialysis Center Practices Survey.
- Facilities enrolled as AMB-HEMO (facility type used for outpatient in-center dialysis facilities) are required to fill out the survey **once per year**.
- The survey is available for completion and submission the **second week of February**.
- Survey responses must be accurate, as this information drives denominator data and risk adjustments.

What to Report – Monthly Reporting Plan

- The Monthly Reporting Plan is used by NHSN facilities to inform CDC that facilities are following the NHSN surveillance protocol.
- A Monthly Reporting Plan must be completed before data can be entered into NHSN for that month.
- Save a Monthly Reporting Plan with the **Dialysis Event (DE)** checkbox selected for outpatient hemodialysis clinic and outpatient hemodialysis clinic – Acute Kidney Injury (AKI) locations under Events for each month the facility participates in Dialysis Event Surveillance.

What to Report – Dialysis Events

- **Report the following event types:**
 - IV antimicrobial starts
 - Positive blood cultures
 - Pus, redness, or increased swelling at vascular access site
- **Events must be attributed to the facility where the patient receives dialysis.**

What to Report – Denominator Data

- Denominator is the number of patients by vascular access type used to estimate patient months at risk for dialysis events.
- Each month, report the number of hemodialysis outpatients and their vascular access type from the first two working days of the month.
- Include all hemodialysis outpatients (including transient patients).
- Exclude non-hemodialysis patients and inpatients.
- Report every month, even if no dialysis events occur.
- Count each patient once; if multiple accesses, record only the highest-risk access type.

Reporting Boundaries: Patient Report vs. Facility Verification

Patient Reported vs. Provider Observed Symptoms

- Patient reported symptoms alone are not sufficient for NHSN dialysis event reporting.
- NHSN requires clinical staff documentation (e.g., pus, redness, tenderness at vascular access).
- Symptoms must be directly observed, documented, or verified by a healthcare provider.
 - Example: If a patient says, “I saw pus yesterday,” but staff does not confirm – **not reportable**.
 - Example: A provider sees pus or tenderness during assessment – **reportable event**.

Objective Evidence for Reportable Dialysis Events

- **Required elements under NHSN Dialysis Event protocol:**
 - **Physical exam:** pus, redness, swelling, tenderness at vascular site
 - **Laboratory data:** positive blood culture
 - **Medical interventions:** IV antimicrobial starts
- **Not acceptable as stand-alone evidence:**
 - Patient and family statements
 - Photographs shown by patient and family
 - Reports without provider verification

Handling External Reports (ERs/Other Facilities)

- **When to report:**

- ER note or hospital discharge summary documents **pus, redness, or swelling** at the vascular site.
- ER starts **IV antimicrobial therapy** for suspected infection and antimicrobial is **continued** at your facility.
- Hospital laboratory reports **positive blood culture** collected during hospitalization.
- Example: ER note stating “pus at catheter site, IV antibiotics started” is **reportable**

Handling External Reports (ERs/Other Facilities) Continued...

- **When not to report:**
 - Only patient and family verbally reports what another facility observed
 - Photo evidence shown by patient and family without provider verification
- **Best practice:**
 - Always request **transfer or discharge** documentation when patients return from ER/hospital

NHSN Dialysis Event Key Terms

Core Surveillance Terms

- **Dialysis Event (DE):** A defined occurrence related to outpatient hemodialysis that must be reported to NHSN.
- **Denominator Data:** Monthly patient counts by vascular access type, used as the basis for calculating infection rates.
- **Numerator Data:** Dialysis events (positive blood cultures, IV antimicrobial starts, access site infections).
- **Patient Months:** The unit of measurement based on denominator data for calculating infection risk.

Reportable Event Terms

- **Positive Blood Culture (PBC):** Any positive culture collected in a hemodialysis outpatient or inpatient setting.
- **IV Antimicrobial Start:** New intravenous antimicrobial administration.
- **Pus, Redness, Tenderness:** Local signs of infection at the vascular access site observed by a healthcare provider.

Access and Patient Type Terms

- **Vascular Access Type:** Method used for hemodialysis (e.g., fistula, graft, tunneled catheter, non-tunneled catheter).
- **Transient Patients:** Patients who receive dialysis temporarily at a facility and must be included in denominator counts.
- **Outpatients:** Patients receiving hemodialysis in an outpatient setting (inpatients are excluded).

Reporting Requirement Terms

- **First Two Working Days:** Timeframe each month to capture denominator data.
- **Provider Verification:** Symptoms must be observed or documented by staff. Patient reports alone are insufficient.
- **Highest Risk Access Type:** If a patient has multiple accesses, report only the highest risk type (e.g., catheter > graft > fistula).

Analysis and Benchmarking Terms

- **SIR (Standardized Infection Ratio):** Measure comparing observed vs. predicted infection events.
- **Benchmarking:** Comparing facility level infection rates to national NHSN data.
- **QIP (Quality Incentive Program):** CMS program that ties NHSN reporting to facility reimbursement.

Key Reminders

- **Patient reports do not equal reportable events. Provider must observe or document findings.**
- **Denominators matter. Count all outpatients and exclude inpatients.**
- **Verify external records if available before reporting to NHSN.**
- **Report consistently each month.**
- **Timeliness is critical. Capture the denominator data from the first two working days of the month.**
- **Accuracy drives impact. Data are used for benchmarks, SIRs, and quality improvement.**
- **The NHSN Dialysis Event Protocol is your guide. Always reference the protocol when you're unsure.**

Resources and Support

- [NHSN Dialysis Event Surveillance Protocol](#)
- Submit [Service Now ticket](#)
- NHSN CDC Dialysis team – NHSN@cdc.gov

Thank You

For more information, contact CDC/ATSDR

1-800-CDC-INFO (232-4636)

TTY: 1-888-232-6348 www.cdc.gov www.atsdr.cdc.gov

The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention and the Agency for Toxic Substances and Disease Registry.



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